

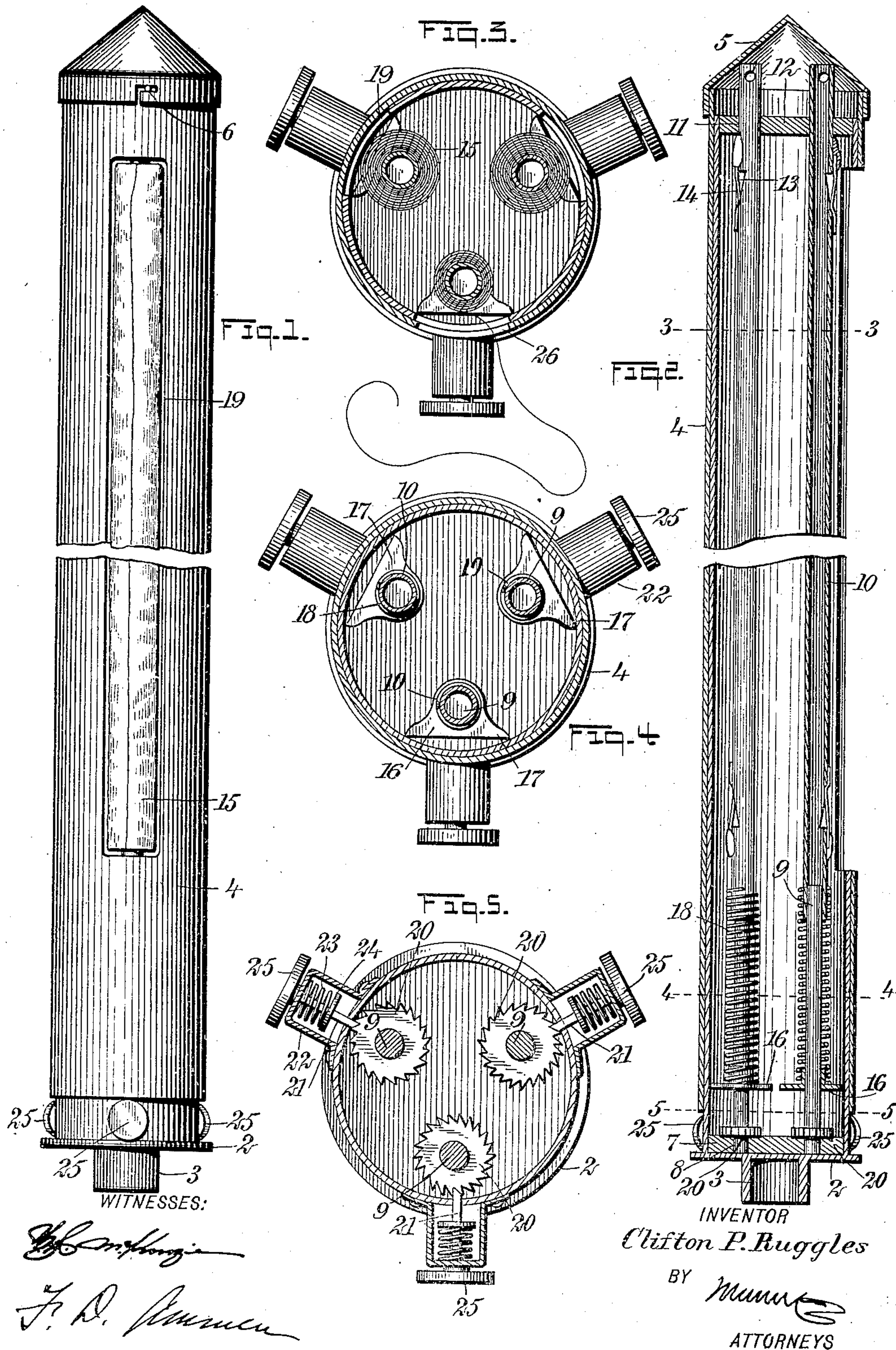
No. 835,474.

PATENTED NOV. 6, 1906.

C. P. RUGGLES.

SIGNAL.

APPLICATION FILED NOV. 6, 1905.



UNITED STATES PATENT OFFICE.

CLIFTON P. RUGGLES, OF TEXARKANA, TEXAS.

SIGNAL.

No. 835,474.

Specification of Letters Patent.

Patented Nov. 6, 1906.

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To all whom it may concern:

Be it known that I, CLIFTON P. RUGGLES, a citizen of the United States, and a resident of Texarkana, in the county of Bowie and State of Texas, have invented a new and Improved Signal, of which the following is a full, clear, and exact description.

This invention relates to signals, and is intended to be used especially as a railway-signal.

The object of the invention is to provide a flag holder or staff which will normally conceal a plurality of flags or similar signals of different colors or significance, arrangement being made for bringing any one of these flags into view when desired.

The invention consists in the construction and combination of parts to be more fully described hereinafter and definitely set forth in the claims.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a front elevation of the signal, the same being represented as broken away, as will appear. Fig. 2 is a vertical central section through the signal, and this view is also broken away. Fig. 3 is a cross-section taken on the line 3 3 of Fig. 2. Fig. 3 is upon an enlarged scale. Fig. 4 is a cross-section taken on the line 4 4 of Fig. 2 and is also upon an enlarged scale, and Fig. 5 is a cross-section taken on the line 5 5 of Fig. 2 and upon an enlarged scale.

Referring more particularly to the parts, 1 represents an inner casing, which is preferably of substantially cylindrical form, as shown. This casing is closed at its lower end by a head 2, which is formed with a socket 3, permitting the casing to be attached to a support, as will be readily understood. This inner casing is inclosed in a cylindrical outer casing 4, which fits snugly upon the same, as shown, and this outer casing is closed at its upper extremity by a suitable cap 5, which preferably is attached thereto by means of a bayonet-joint connection 6. (Shown in Fig. 1.)

The head 2 comprises a block 7, which is provided with a plurality of openings 8, constituting bearings for rotatable stems 9. I have represented three of these stems; but there may be more or less of them, as desired. Over the upper extremities of these stems 9

tubular flag-holders 10 are rigidly attached, the same being disposed longitudinally within the casing. Their upper extremities pass through guide-openings 11, formed in the head 12, which is rigidly secured in the upper extremity of the inner casing 4. At suitable points these flag-holders are provided with notches 13, adjacent to which small springs 14 are arranged, and these notches and springs afford means for attaching flags 15 or similar signals to the holders, said flags being wrapped upon the holders, as indicated most clearly in Fig. 3.

Upon each of the stems 9 a collar 16 is slidably mounted, and these collars present oppositely-projecting arms 17, which are adapted to engage the inner face of the wall of the inner casing, so as to prevent the rotation of the collars, although they may be advanced on the stems. Each of the stems is inclosed in a helical spring 18, and the upper extremities of these springs are rigidly attached to the lower extremities of the flag-holders 10, the said flag-holders preferably being received within the interior of the springs, as shown in Fig. 4. The lower extremities of the springs 18 attach rigidly to the collars 16.

Opposite the flag-holders 10, as indicated most clearly in Fig. 3, the inner casing 1 is provided with longitudinally-disposed openings or slots 19, and these slots afford means for pulling the flags out into view. To accomplish this, the end of the flag will be seized and pulled outwardly. As the flag is pulled outwardly in this manner the flag-holder 10, which carries it, will be rotated, together with the stem 9 corresponding to the flag which is seized. In this way the spring 18 of the flag will be rotated and will constantly tend to rotate the flag-holder, so as to roll the flag up upon it. In order to prevent the flag from rerolling, so as to disappear within the casing, I provide the stems 9 with ratchet-wheels 20. Opposite these ratchet-wheels plungers 21 are provided, which project into the casing, so as to engage the ratchet-wheels, as shown. These plungers are mounted in suitable brackets 22 and are pressed inwardly by springs 23, which rest against the brackets and against heads 24, which are carried by the plungers, as shown. These plungers allow the ratchet-wheels to rotate in the direction which unrolls the flag, but will not allow them to rotate in the opposite direction, so that when a flag has been pulled out, as suggested, it will

remain extended, so as to present itself to view as a signal. The outer extremities of the plungers 21 are provided with thumb-heads 25, which enable the plungers to be
5 pulled out as desired, so as to release the ratchet-wheels. When a ratchet-wheel is released in this manner, the flag is immediately drawn in and rolled up through the medium of the spring.

o In order to enable the flags to be drawn through the outer casing, the said outer casing is provided with a longitudinally-disposed slot or opening 26 and the outer casing is rotatable on the inner casing, so that this
15 slot may be made to register with any of the slots 19 already described. When none of the flags are in use, the outer casing will be rotated, so that the slot 26 does not register with any of the inner slots, and in this way
20 the interior of the casing is tightly closed to operate as a weatherproof covering for the flags.

The flags will of course be of different colors or have different significance.

25 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. In a signal, in combination, an inner casing having a plurality of openings in the
30 wall thereof, a plurality of flags mounted in said casing opposite said openings and adapted to be drawn therethrough, and an outer

casing rotatably mounted on said inner casing and having an opening adapted to register with any of said first openings. 35

2. In a signal, in combination, a casing having openings in the wall thereof, a plurality of rotatable flag-holders mounted in said casing opposite said opening, flags carried thereby and adapted to be extended
40 through said openings, springs constraining said flag-holders to rotate, means for locking said flag-holders against rotation, and a rotatable outer casing mounted on said inner casing and having an opening which may
45 register with any of said first openings.

3. In a signal in combination, a casing having an opening therein, a rotatable stem mounted within said casing, a tubular flag-holder telescoping with said stem, a flag at-
50 tached to said flag-holder and adapted to be extended through said opening, a collar slidably mounted on said stem, a spring engaging said flag-holder and attached to said collar, and means for locking said flag-holder
55 against rotation.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

CLIFTON P. RUGGLES.

Witnesses:

E. C. SEIBERT.

E. A. NEWMAN.